

In the claims

1. A method of allocating memory space in a memory when switching  
5 between a DVD-video mode and a DVD-audio mode in a DVD-A/V player,  
comprising:

storing a current video frame in a first portion of the memory during  
the DVD-video mode;

10 copying the current video frame to a predetermined second portion of  
the memory;

designating the first portion of the memory as an ASV buffer; and

15 changing a frame buffer management scheme so as to preserve the  
ASV buffer.

2. The method as recited in claim 1, wherein the first portion of memory  
is different from the second portion of memory.

3. The method as recited in claim 1, wherein the first portion of the  
memory is a current display buffer.

4. The method as recited in claim 1, wherein the second portion is a  
reconstructed display buffer.

5. The method as recited in claim 1, further comprising:  
pausing the DVD-A/V player in the DVD-video mode;  
setting the DVD-A/V player in the DVD-audio mode;  
determining if the current display buffer is a reserved display buffer;

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6. The method as recited in claim 5, wherein when the current display buffer is the reserved display buffer, copying the current video frame to the predetermined second portion of the memory

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7. The method as recited in claim 6, further comprising:

when it is determined that the current display buffer is not the reserved display buffer then,

identifying the current display buffer as the reconstructed buffer.

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8. The method as recited in claim 1, wherein the memory is a SDRAM memory coupled to the DVD-A/V player.

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9. The method of allocating memory space in a memory when switching between a DVD-video mode and a DVD-audio mode in a DVD-A/V player, comprising:

storing a current video frame in a current display buffer portion of the memory during the DVD-video mode;

pausing the DVD-A/V player in the DVD-video mode;

setting the DVD-A/V player in the DVD-audio mode;

determining if the current display buffer portion of the memory is a reserved display buffer portion of the memory;

5 copying the current video frame to a reconstructed display buffer portion of the memory when the current display buffer portion is determined to be the reserved display buffer portion of the memory;

designating at least the current display portion of the memory as an ASV buffer; and

10 changing a frame buffer management scheme so as to preserve the ASV buffer.

10. The method as recited in claim 9, wherein the reserved display buffer portion of the memory is different from the reconstructed display portion of the memory.  
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11. The method as recited in claim 10, further comprising:

when it is determined that the current display buffer portion of the memory is not the reserved display buffer portion of the memory then,

20 identifying the current display buffer portion of the memory as the reconstructed display buffer portion of the memory.

12. The method as recited in claim 9, wherein the memory is a SDRAM memory coupled to the DVD-A/V player.

13. An apparatus capable of allocating memory space in a memory when  
5 switching between a DVD-video mode and a DVD-audio mode in a DVD-A/V player, comprising:

a means for storing a current video frame in a first portion of the memory during the DVD-video mode;

10 a means for copying the current video frame to a predetermined second portion of the memory;

an means for designating the first portion of the memory as an ASV buffer; and

15 a means for changing a frame buffer management scheme so as to preserve the ASV buffer.

14. The apparatus as recited in claim 13, wherein the first portion of memory is different from the second portion of memory.

15. The apparatus as recited in claim 14, wherein the first portion of the  
20 memory is a current display buffer.

16. The apparatus as recited in claim 15, wherein the second portion is a reconstructed display buffer.

17. The apparatus as recited in claim 13, further comprising:  
means for pausing the DVD-A/V player in the DVD-video mode;  
means for setting the DVD-A/V player in the DVD-audio mode;  
means for determining if the current display buffer is a reserved display  
5 buffer;

18. The apparatus as recited in claim 17, wherein when the current display  
buffer is the reserved display buffer further comprising means for copying the current  
video frame to the predetermined second portion of the memory

19. The apparatus as recited in claim 18 when it is determined that the  
current display buffer is not the reserved display buffer then, further comprising:  
means for identifying the current display buffer as the reconstructed buffer.